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Notes on the Geography of Western Afghanistan. By Major Wilhinm Anderson, Bengal Artillery.
Any person attempting comparative Geography, soon learns how very little dependance is to be placed on the geographical written proper names of even the best classical authors; words evidently intended to be identical, may be traced through all possible forms of spelling, exhibiting any near approach to each other. It occasionally happens, that authors of no repute may from accidental circumstances have learnt the real correct form of a word, of which the most learned commentator has been entirely ignorant. The Greek and Latin geographical writings on Asia are chiefly composed by learned authors, in their closets, from laborious studying and reading of more ancient works of travel and of history; little discrimination was exercised over the various facts, in rejecting repetitions or in distinguishing between the same relation given, with only a few slight variations of circumstances; hence, the greater accumulation of error will be found in the latter anthors, who often contain undigested all those mistakes to be found in previous writers. Very little dependance can be given to the names of places, distances, directions or bearings, in the relation of the movements of the soldier, merchant or mere traveller; they are often, I suspect generally, subsequently compiled from memory, than which nothing can be more treacheroas or liable to err. Let any one attempt from mere recollection to recall any long line of marching; and he will often, very often find himself unable to determine with precision which places preceded each other in the route, although he may be able to give a very fair

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general account of the whole line of march, and a particular version of many occurrences. The relation of time and order is not well remembered. Many intermediate points between two important ones are often entirely forgotten and omitted, or misplaced. Almost 'the whole of the details of the geography of Asia were obtained by the Greeks and Romans from the hearsay evidence of travellers and merchants; it was hence less to be relied upon as the distance explored was greater. It certainly was not the custom of earlier times, for merchants to make the venture of the entire line of traffic ; the merchandize of Hindustan was carried by Indian merchants to Afghanistan ; by the merchants of this country to Persia; and by the traders of this quarter to Syria or Egypt, and so on ; the inhabitants of one end of this chain, received but a very confused and indistinct account of the proceedings of those at the other end. Yet much of the information so obtained, is now matter of geographical comparison. Let the confusion made in Asiatic names by Europeans of the last century be borne in mind and then we shall not be astonished at the little progress now made in tracing out the districts and nations of antiquity; the more so when we add the errors of copyists for 2000 years. Nor are we quite assured of the real measure of all the terms used for distance, time, weight, or motion.

The attempts to graft measured distances, or assumed travelled distances, on positions established by astronomical principles, is also a constant source of error; as little allowance is given for the reduction necessary to constitute a right line ; or to the difference of the length of the degree under different latitudes. It is this last error which has carried out all places in central Asia, so far to the East of their proper position.*

The intermixture of systems has also caused endless trouble. The travels of one man are conceived in his mind, and perhaps so writtea down, on a certain scale, those of a second writer on a greater or a leas scale, while a third person, attempting to combine the two on the iden of their being formed on an equal mental measure, would produce moost erroneous results-it is this which transposes places on the maps. Also is to be remembered another constant but now untraceable error, confu-

[^0]sion in the meridians whence the longitude is to be measured.* From these and many other causes I believe the greatest license may be taken in fixing towns or districts or people, which are not firmly determined by more than one proof or argument.

The usually accepted measures are,
1.087 Greek stadii $=1$ English furlong.
8.69 " $\quad=1$ English mile.

125 Roman passi $=1$ Greek stadium.
$135.8, \quad,=1$ English furlong.
1.057 Roman Millia passuum 1 English mile.

These are founded on the passus being considered what in England would be called a double pace-or supposing the legs to be viewed as a pair of compasses; one foot fixed in the centre and the other describing a circle, the English pace is the radius, but the Roman passus the diameter. $\dagger$
Again, are to be well distinguished the natural divisions of countries as indicated by rivers and mountains; the proper or acknowledged districts as marked out by long established boundaries; the political as held under the temporal power, constantly changing of different dynasties ; this last is a grand source of error in eastern travels. For instance, we find Kundahar noted as a province of Persia, of Herat, of Seestan, of India, of Kabul and even of Cashmír. Language, religion, and productions, also afford a means for classification.
According to Pliny, the Geographers of the Alexandrian expedition,

[^1]took a freah departure from the Caspian Gates, and calculated 3000 stadii to Zariaspa, a city of Bectria, and 5000, more to the Jaxratea or modern Sehon; distances measured no doubt along a high road and from ferry to ferry of the rivers. S. 18, C. 16, Book 6 , says :-
"A Caspiis ad orientem versus regio est Apavortene dicta, et in $\mathrm{C}_{2}$ fertilitatis inclytse locus, Dareium." This I conclude to be the modem Abeverd, or Bavurd, the district round Kelat; the birth place of Nadir; near it our maps do place a Deregus. Justin says, the first Arsuces founded this place, Dareium, among the mountains of Zapaortenon; "Cujus loci ea conditio est, ut neque munitius quiquam cesse neqpe amenius possit; Ita enim, et preraptis rupibus cingitur, ut tutila loi nullis defensoribus egeat; et soli circumjacentis tanta ubertas ext, ut propriis opibus expleatur."

Khojah Abdol Kureem, who accompanied Nadir on his return frow the invasion of India, says:-"The town of Kelat is surrounded by high mountains so perpendicular as to be absolutely inaccessible; on the side of Meru is a large gate where the guards examine every parson who goes in or out ; this leads to a pass so narrow, as to addmit only one horseman at a time, and over which the mountains meet at the top in a most astonishing manner ; forming a natural arch. The canal upon which the cultivation of Kelat depends enters the town on the side of Mushud, and goes through the pass of Meru. Abivurd is a populous town, it is also called Baward." Kelat thus appears a vey rimilar place to, if not identical with, Dareium ; and in Abeward ar about Mushud, we have the centre or starting point of the Parthisa nation,* a desideratum in ancient history. Next, to the eastward we may trace Margiane in the modern Moorgab. And in Merve-ol-rood, or Merve, $\dagger$ on the river, I have no doubt we may accept the city built by Alexander, destroyed by the barbarians and restored by Antiochass Pliny uses the words "interfinente margo." Isidor adds, "Avrwxem \{neloúpevn \&y wpeos," all pointing to the deaignation still maintained in "Merve-

* It is worthy of observation as a curiosity, the introdection by Jectia of ith letter $Z$ as in Zapeortenon. This is as an example of the depeadance to bo pheod on proper names. Our printed words have obtained a prescription of correctain to which perhape they are all ill entitled.
$\dagger$ This second Merve has been plseed by some writers, either on the baikn of close to the Oxas ; and hence carried to the North of Merve Shahjuhen ; in place of being some 80 miles South-East of this place.
ol-rood." Orodes here carried his prisoners after the defeat of Crassus. From it, over the mountains of Cancasus existed, as at present, the road to Bacrisis, (Balkh :) Of the numerous tribes mentioned by Pliny, I can only speculate on Ochani, which may have reference to the Ooghans. The Harmatotropki "qui curules equos alunt" as having some connection with Andakhoo or Muimoonuh, very celebrated marts for large Torlomance horses.

Canddari are the tribes of Kundahar. Paricani those of Furah. Sarange those of Zurung. The Gelæ, quos Greci Cadusios, appellavere, may be the modern Kords round Mushud, or the inhabitants of Ghoor. Heraclia built by Alexander, destroyed by the natives, restored by Antiochus, and called Achaida, looks very like the of repeated history of Herat.

I am inclined to consider the Ochus and Oxus to be the same river under different modes of writing, a mistake created by the mal-location of Merve-ol-rood. The present stream of Bulkh, called the Bulkhab, is certainly not navigable, and its water does not in all seasons reach the Oxus.

The Sariphi mountains, dividing Aria from Margiana, are those round Surukhsh. The river Jaxarte, quod Scythæ Silin vocant; "has a very near approach to the modern term of Sehon. In seven days it was reported to Pliny goods could be carried from India (Kabul, its frontior) to the Icarum river of Bactria, flowing into the Oxus, and down that river into the Caspian, and hence be distributed over Asia Minor from the river Kur or Cyrus." No doubt goods might reach the Oxus in seven days from the top of the ranges, the frontier of India; the only real omission in this very general outline being the second land trip from Kheva to the Caspian. For in these mountainous districts there can hardly be rivers navigable for boats; their course is too rapid, their beds too rocky and the fall too great. I doubt if a boat exist in the country till the Oxus on the one side reaches the sandy deserts near Termes ; or the Helmund on the other side debonchen on the leval flats of Gurmsail. But roads all lie along the beds of these streams, for the sake of water or of passage round the rocks,-hence a native going from Guznee to Kundahar invariably adds, "down the Turnuk," or "down the Argundab," without the slightent idea of the interrention of a boat. Icarum has a shade of the word Ghor, which
would thus be the stream passing Kunduz ; this process would occupy, as it does at present, the merchants, of four nations. The routes of merchandize depend chiefly on the safety of the roads and protection afforded by chiefs, as well as on the seasons; my belief, nay my experience is, that mere traders are entirely ignorant of every thing beyond their own beat of trade. The Lohanee merchant of Guznee who brings the beautiful froits of Kabul to the imperial city of Delhi, could give on his return home but a very imperfect account of how the same fruit reached the port of Calcutte, and so it was in the days Pliny wrote. The following are given by this author as the distances measured by Diognetus and Boeton, with the army of Alexander.

Roman Miles. Perhaps.

| Fro | 133 |  |
| :---: | :---: | :---: |
| to Alexandria of Aria, | 566 | Herat. |
| ,, to Prophthasia, | 199 | Furah |
| , to Arachotiorum oppidum, | 515 | Kundah |
| , to Orto spanum, trivium e Bactris, | 250 | ar |
| , to Alexandria sub-Caucasa, | 50 | Near Myds |
| , to the river Copheta et oppidum Peucolaiti | 227 | shaw |
| , to the Indus and Taxila, | 60 |  |
| , to the Hydaspes, | 12 |  |
| to Hypasis, |  | ither | river is intended for the Acecines, or as I find some one has indicated by a pencil note in the Asiatic Society's copy of Pliny, that CL. have fallen out from the CLXXIX. in the distance of 179 miles.]

The name Imaus, Hemalaya, in the language of the natives signifed " Nivosum," or covered with snow.
Having worked round the coast of India Pliny returns up the Indes, to the Peucolaito, Arsagalitce, Geretoe, Asoi; the former of whom are identified in Pukulee, and the last may be the modern Esa nation ; for no less a term than nation will describe the present Esa Khuel. Foor provinces are then mentioned which were by some considered as Indian, by some made Persian.

Mountains surrounded the districts next the Indus river. One province was called Capissene-had a capital Capissa, кartoca, also writtea Caphusa ; this capital was destroyed by Cyrus. The qity and district
had clearly the same name. I am inclined to assume that Capis and Kabul are intended to represent the same word.

Another of these four provinces is Arachosia, with a capital and river of the same name; which last some considered to be the river indicated by the term Cophen. The town was built by Semiramide.

The river Erymanthus flowed past Parabesten of the Arachotii.*
To the South of the Arachotii was the third Province of Gedrosia; probably round the modern Kedje. To the north was the fourth of the Parapamisadæ. In this last district, there is mention made of a city called Cartana, under the mount Caucasus; afterwards called Tetragonis. Also of Alezandria in Bactria, and of another city of this name under Cancasus. Tribes are called Syndraci, Dangalæ, Parapiani, Cantaces, Maci.

Cartana has a trace of reference to the Ghor of Ghorbund, and Charikar may have relation to Tetragonis; Parapiani has been considered to exhibit a vestige of Hupian, north of Estalif.

If the Par, Por, Boor may be thus relinquished, I would propose Bamean as a type of Pamisus or Bamis; we might almost fancy the range of Para Khoaltrus being but Kohulturusuh or Mount Taurus! so Para Pamisus ; and assuredly in Arabic or Persian باعيان and بانسان would be hardly distinguishable.

Huree, Aria; Eeran, Ariana, are often confounded together ; in regard of the former Pliny mentions ; cities Artacoana and Alexandria on the Arius; the river being clearly the Huree rood, also Artacabane restored by Antiochus.

A people are called Dorisci.
One river is named Pharnacotis, and a second Ophradus, probably the Furah rood; Prophthasia is given as a city of Zurung, hence of Seestan.

With respect to the ranges of mountains, Caucasus, Kor-Kosi is used as a term for the whole; Paropanisus or Paropamisus, for those towering above Kundahar and Guznee. The Emodus constitutes the

* This is clearly the modern Best, the prefix Para may be a misreading, or may be bat the word Poor or Boor, used for city, as the "town of Best." It might be well known that there was both a capital and a river in the district of Arachotia, although their proper names were unrecorded. Arabian authors all attribute the fomodation of Kundahar to a queen of Arabia, perhaps Assyria, callod Bulkees.

Northern, and Imans the Eastern and Southern branch of the grand Hemalayan chain. The whole of Pliny's references to these parts bear the appearance of an assemblage in a common-place book of all that could be found relating to them in other works.

Mistaking places of the same or nearly the same name, but of entirely different locality, has led to much confusion, of which the following appears to me an instance. "On the borders of Bectrin, conterminous with India, is the district of Choarene, the nearest conrtry to India occupied by the Parthians ; according to Strabo it is 1900 stadii from Ariana, and yet he says Craterus marched through it on his way from India, to the country of the Arachoti, which would bring it within the limits of Arians itself. The statements are clearly incompatible, and it is not easy to conjecture a situation for a province of which no other notice occurs." Such is an extract from Wilson's Ariana. But if we accept Bactria for Bakhtur, as considered by Moslem authors ; including Gurmsail and the countries N. W. of the Helmund, and read Kharan for Choarene, we have a province which shall falfill all these required conditions.

The Nuzuhut-ol-Kuloob of Humdallah Kuzweenee, gives the following rontes and distances:-
Rue
Dure ameen,. . 6 The Wurameen of maps-once a large town of Bre. The Dur may have reference to Pyloe.
Khawur, ..... 12
Ras-al-Kulb,.. 12
Semnan, .... 10
Damghen, .. 20 Supposed to be Hecatompylos.
Bostam, .... 13
Jajurum, .... 23
Neahapore, .. 42
Boochegan, .. 38
Herat. ...... 30
Polybius says Hecatomphilos takes its name, "for that all the per sages of the neighbouring countries join there;" now Humdallah makes two roads from Khorasan unite near Damghan; but from Bostam be carries off the grand northern road to Kharism, which is more in the sense of Polybius. From Bostam to Herat is 133 Fursukhs $\times 4.25=$

566 Roman miles ; from Semnan to Bostam is 33 Fursakhs $\times 4.25=$ 140 Roman miles, to meet Pliny's. 133.

To cover the distance of 199 Roman miles to Prophthasea, we have the distance measured by the British Embassy from Herat to Sheheruk, on the Furah rood, of 131 British miles, with 20 more to reach the old city of Furah; and as this was the very shortest cut for a small party, we may grant that the large Army of Alexander, marching with the waters, would have covered 183 British miles, or 199 Roman miles to near this spot,-I believe a numerous party would go round the range to the sonth of the city of Herat.

The 515 Roman miles to Khundahar is not so easily established; but I believe Alexander, in taking the city or capital of the Zurunge of Seestan, to have marched round the lake of Seestan and up the Helmund to Best, and thence to Kundahar.

An intelligent sergeant of sappers fixed the Fort of Joween in Lat. $31^{\circ} 31^{\prime} 56^{\prime \prime}$. The Latitude given for Zurang by most Arabian and Persian authors is $30^{\circ} 30^{\prime}$.

The distances will then stand :-


Hence there is a deficiency of 190 miles to make up the 515 of Pliny. It is not impossible that this may be an error ; and it is strange that in the last distances of his route, from the Hydaspes to the Hyprasis, we find an apparent omission of 150 ; the grand total being nearly correct.

In the Geography of Moses of Chorenene, written in the Armenian language in the fifth centary, and translated into Latin in 1736, we find a list of the districts forming many countries of the East ; and from them we might expect names obtaining previous to the Moslem conquests; but alas! the nearest approach to most of them are not satisfactory ; but
as it often happens that a second reader may hit on a word which has escaped the search of a previous one, therefore I have copied the names, although the authenticity of the work is doubtful.

Persia is called Chuste Neemroz, touching the eastern border of Churastan, and the confines of Media; containing twenty Provinces.

Pers idem.
Aspahan iam.
Mesun iam.
Hacar iam.
Panat iam.
Cerman iam.
Curan iam.
Macuran iam.
Send am.
Hend am.
Meran am.
Petvastan iam.
Segastan iam.
Aplastan iam.
Deram.
Melam.
Mahic iam.
Maun iam.
Chozerhastan iam. Khezeristan.
Palham.
Ebuham.
Rhesira Parhasania. Producing the best Pearls. Bahrien.
Aria, is called Chuste Chorasania; lying between Media, Persis, the Caspian and India.

Comis ia.
Hyrcan ia.
Apersaria.
Meru ma.
Arovastia.
Rheucatesania.
Nestimanaca.
Beznia. Boozjan, near Jam?

Salcan ia.
Docan ia.
Anaplia.
Heru ma.
Zambyr us.
Naxeria.
Dexina.
Avazachia.
Varzania.
Mansania.
Zaxtana.
Bahlia que et Parthia. Balkh.
Domatia.
Talkan.
Damghan?

Subzwar?

Zoozen.

Beerjun?
Muzeenan?
Kohestan?

Huree ; Herat.
Neeshapoor?

Dumadutha; Dumadoot : or Deemut of Dumawund.

Siria.
Saree ?
Baricania.
Dobonia.
Scythia is called Apachtaria, Bactria, and Turchia, extending from the Volga to the Himalaya, even unto Zenia, China; it is inhabited by many nations, among them the Sogii, Thocarii, and Hepthalii.

Moses Chorenensis is considered to have written his history and his geography in the fifth century. It is clear, that he had consolted the works of Ptolemy and other Grecian as well as Latin authors,-but whether his Persian and Asian Geography is based on European or Eastern authority, is a question of interest to be decided. Perhaps other readers may hit on better identifications of the names than those I have given, and may add to the list. The time has reference to the reign of the great Buhram, of Persia, for whom Moslem authors claim extensive conquests in India, embracing Scinde, the Punjab, and the N. W. provinces of India yound Sirhind. This last always appears to me as the districts indicated by the word Hind. If Aplastaniam is Afghanistan, this date destroys all the fanciful etymology of the Persians for the word, and certainly its position between Segistan and various ports on the sea coast, warrants the assumption.

And if Maunia be Mandavee, the conquests of the Persian kings by means of their ships were more extensive than is usually supposed.

From the intimate connection between Armenia and Peraia we may fairly grant a distinguished scholar of the former country might have obtained a correct account of the names of the larger districta of the latter country, but whether the words are attempts to write spoken terms, or are transcripts in Armenian of originals in Zund Puhluvee, or Duree, is a question to be determined by those who have the knowledge and means. There runs an apparent analogy through the worde, which warrants something better than mere spoken corruptions.

The Armenians interchange $\mathbf{D}$ with $T ; B$ with $V$, and add an mitial A.

The author would no doubt be in terms of friendly communication with the various Nestorian Christians scattered through Perria; and from them obtain information; thus Domatia, Dumadutha is recorded by the Nestorians as the seat of a bishop of their faith.

The next link in the geographical chain which is accessable to me, lies in the Persian works on this subject, or English translations from the Arabic; for alas! the original works are not procurable.

In a country where the revenue is almost entirely obtained from a tax on the various produces of the soil; where with few exceptions the land and the water are considered as the property of the superior power, to be by it distributed, under reservation of portions almot rendered fixed and permanent by time and prescription, in such a conntry almost every fertile spot, every well-watered acre of land, is known perfectly by the durbar of the local authorities, and generally, though less minutely by the grand officers of the capital. Such lands are marted out as prises to be obtained in jageers by the courtiers. A mach greater amount of such statistical knowledge did exist in the revenue offices of the East, than it is usual to suppose. These offices could tell to a fraction, the names, area and production, of a particular plece, although entirely ignorant of any data to position obtainable from Longitude or Latitude-the situations as known to them being determined by very general bearings from some capital, and the usanl marches for travellers-or for revenue collectors. Thas if we examine any particular history of a place, Herat, for instance, we find reconted all the fertile spots, all the well filled canals, all the pretty rillages; their extent and fruits; with the various places of pilgrimage, and all the wonderful productions of nature in hot-springs, caveras, of
rocks, and last, but not least, the names of all learned or religious men to which the spot has given birth. All such are fully recorded, and had time spared sufficient particular histories, I believe a most complete general map could be produced.

Moslem authors do not forge facts of science, though they often misunderstand and misrepresent them; and taking too much for granted, do not sufficiently distinguish and examine ere using the statements of others. More attention is paid to embellish a fact with words, tropes and epithets, than to examine the correctness of the fact, or its bearing to the subject under discussion.

I believe the names of places do not change to the extent supposed; and that more is traceable to the mistakes of copyists and of readers, and to modern forcing of names, to suit particular theories.

We must also bear in mind, that the seat of the supreme authority has been so often removed, that there is hardly a district in the capital of which the dominant power over Southern and Western Asia has not resided. From Mecca it has advanced to Kofa, Baghdad, Merve, Bokhara, Sumurkund, thence retraced its steps to Khewa, Guznee, Seestan, Herat, Ardewan, Demascus, and Constantinople. Even Kara Korum, in Chinese Tartary has been the residence of a mighty chief, whose sway extended over the whole of Asia; while Abewurd, Balkh, and even Kundahar, are not without their claims to be considered as royal residences. Hence in the various histories of these places, now lost, I have no doubt could be traced ample means to fill up all the blanks in all our modern maps.

The professed works on Geography, in which recourse has been taken to determine the positions of places by the means of latitude and longitude, are many, and of two distinct classes ; the first class embraces those of which the authors were both travellers and men of science, who could determine their own position at any period by rules of science, and reduce other neighbouring places to a fairly correct position, such I have no doubt were Ebne Huokul and Aboo Rehan ; both celebrated authorities on geography, whose original works would prove treasures of great value ; Although their absolute longitudes and latitudes are not very correct, when compared with the scientific calculations of modern days, still they were close approximations in the case of the latitude, to the truth,-sufficiently near to answer all the required
purpose. The longitudes are all far more remote from reality, and when extended over a long space, are nearly valueless; still when the authors have been in person on the spots, the differences of both latitude and of longitude will be found nearly correct enough to determine the position of places at no great distance from each other. Thus would I give much weight to differences of bearings of places from Guznee, as a first meridian, when quoted from Aboo Rehan.

The second class, is that of historians and the framers of geogrphical dictionaries, who compile books from the labours of the fink class. These form systems of their own, under which they endervour in their studies to reduce the discoveries of others.

Some form lists according to the letters of the alphabet ; others according to the climates, and into these they insist on introducing all that can be found written by those who have preceded. No discrimination is used to discover either the correct reading of the witten words, the proper position of the vowels and marks, the undoobted letters of the Abjud numeration giving the latitudes and loagitudes, or lastly, the credit due to the authority; and thas the more modern the author, the greater chance he has of containing the accumulation of all the errors on these points committed by his prede. cessors. Of the errors of the kind of not correctly reading the works, I can give an excellent example; and a proof of how little dependane is to be placed on these written proper names.

Sir William Ouseley's translation, of what he considers Ebne Huokul, contains a list of the rivers of Herat, being in reality the varions cames branching from the Huree rood, and watering the cultivation as fir as certain villages on their banks of which the name of the most distmst or principal is given; these canals are 3 to 4 feet wide, and deep accorting to circumstances. Edresee contains a similar list; and though I have no doubt in my own mind that the type of both is identical, ret hardly two words are now the same, and hardly one correct; al this results from constant re-copying, and such is the worth of the labours of some of our best orientalists, and probably occidentalists.

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \| يروانه وهوا | صميّها هنى | سنداسنته | يرغوي | ومري |
| كرازان | ¢لنجان | ميرشيان | سومان | اردنجان | ارست |
| بغني | غوروان <br> ولِا ثمتان | ورين | شعلته | نسكوكن | * |
| كواها | كدار8 | كراسان و شيا وشان | كورك |  | كراع |
|  | غيا بان |  | كرى |  | غوميجان |
|  | كمبراق | كريكوعريان | كرنكرغزنان | كبك | كنـ |
|  |  | يوشنك | مرخس ويشنـ | هعوكي | شیغر |
|  | انجيل | هرا | \| مدينه هرات | خهركي | جيو |

A very slight knowledge of Persian will show how easily these words may be corrupted in writing and copying. When the word nehr is used for canal, the authority is Arabic; when the term Bulook is used, the source will be Toorkee.

In matters of mistake, regarding the value of the Abjud numeration, any common table of latitudes has only to be opened to prove that they are endless.

For instance, in the tables of Abol Fedae, regarding Khorasan, No. 11, is placed between Zoozun of Kohestan, and Kharjurd of Herat. (Khosh-
ruo jurd خشروخرد,) a place called Khoost of Bulkh, said to be between Indurab and Tokharestan ; and it is so placed because the $u$ of the Loog. $=$ to $90^{\circ}$, has been read $9=80$, and the $\tau$ of the Lat. $=8^{\circ}$, has been read $\epsilon=3^{\circ}$; thus it stands :-

Khoost, Long. 83-47 ; Lat. 33-20; bat should be, I think, - 93-47; — 38

Even with the correct description in the printed text the errors have not been noticed.

The geographical work known by the name of Ebne Huokul, is suid to exist in the library of Leyden, in the original Arabic ; Sir William Ouseley has given to the world a translation from a Persian work on geography, which he considers to have been made into this language from the original Arabic of Ebne Huokul; and certainly, if not a direct translation, the identity of the passages would warrant the Pesian work being considered as a compilation from the Arabic. No particulars of the author appear known ; but Sir William Ouseley consider the work may bear date between A. D. 902 and 968 . The notices of Persia (Fars), are so mach more complete in detail of districts, rivers, capitals, tribes, families, and even proper names and characters of persons, as to sanction the idea of Ebne Huokul being a native of thet province, or perhaps of Arabian Eerak, therefore his accounts of these portions of the east are more to be depended apon. - He traces Mavaolnuhr, as a visitor or traveller would do, while his remarks are full, though not complete on the route of Kerman, Seestan and Merre, lying between Fars and Bokhara. This last city he must have risitod in the days of Nooh bin Nusp, the 4th of the Samanian dynasty of Bokhara. Tables called Utwal and Urooz, bear the name of Ebme Hookul; but a work called Momalek and Musalek-the name of that translated by Sir W. Ouseley-is by natives attributed to Uhmud bin Abu Yakoob Ulkateb.

Aboo Reban, a native of Beroon in Kharism, spent many yens in travel, and was ultimately employed by his king, Mamoon of Kherim as an agent at the court of Guznee, during the reigns of Muhmood and Masood. He was one of the most subtile and clever men of hin age, and passed for a magician; his geographical work is called the Kanoon ul Masoode, and with reference to the place in which it is wittu should be good authority in matters connected with Afghanistan, at the period from 1000 to 1050 of Christ.

A writer on geography is also constantly quoted as Ebne Sueed, of whom little appears known. D'Herbelot adds, that his name was Othman, and that the title of his book was Ketab olmoccenna. This anthor is chiefly known as being an authority of Abool Yeda.

The work of Edresee compiled in the year 1154, for Roger, king of Naples, by Aboo Abdallah Mohummud, should be of authority and weight in questions connected with the Mediterranian, Egypt, the coast of Africa, and perhaps the interior of Asia Minor or Syria.

Abool Fedse, Esmael bin Nusr, Prince of Hamah, in Syria, flourishes as a royal anthor of a work on geography in the Arabic language. He died in the year A. D. 1331 ; his work is entitled Tukweem ul Buladan, and with reference to the country where written, it should have more weight in questions connected with Asia Minor and Syria, than in relation to those at any great distance from his native place.

It is a strange circumstance, and worthy of note, that Kundahar, as a term for a capital, or even district, is not to be traced in the geographical works of common use as connected with the country, to which it is now applied. This fact has created some astonishment ; so much so that Professor Wilson is inclined to consider the name of modern origin.

Thus, if we consider the book translated by Sir Wm. Ouseley to be the work of Ebne Huokul, we find not the word Kundahar where it shoald be looked for, in the direat road from Best on the Helmund, to Guznee; but in the apot now occupied by Kundahar we find Shuhre Rukhuj, being the capital of Arachotia. It may be questioned which is the archtype on these two words, and which the corruption. Bat we are to bear in mind that this work of Momalek and Mosalek, is not proved to be the book of Ebne Huokul; that a work under this title is attribated to another author, viz. Uhmud bin Abee Yakoob.

In the work of Edresee, in the same situation, between Best and Guznee, we trace this identical route, with a few intermediate stations added; giving Rukbuj and Punjwaee as occupying the position of modern Kundahar, set forth in the 7 th section of the third climate. Hence, here we are disappointed in finding the name of the district, slthough, as we shall show hereafter, names are given of places close to the old city of Kundahar. This to a casual observer would be almost conclusive, that the city, or its name was of date subsequent to the
work of Edresee. But on a little closer examination what can be traced? Why, in the 8 th section of the second climate we find-
"Candahar est une ville considérable et très peuplée; Les habitants sont remarquables par le manière dont ils laissent croétre lear barbe, qui lear descend jusqu aux genoux; et qui est large et très touffue, $\infty$ qui a donnè lieu a une facon de parler proverbiale; Lear figure eat ronde, il's portent le costume turk Le pays product du ble, du rim diverses céréales, des moutons et des breufs. Ils mangent les moutons mort naturellement, mais jamais de bæufs,, comme nons l'aoons dit plus hant. De Candahar a Nahrawara on compte 5 journees en cheriot "Les peuples de Candahar sont souvent en guerre avec ceux de Kaboul" laquelle est une ville indienne voisine du Tokharestan grand et bien batie. Ses montagnes produisent du bois d'aloēns excellent, et ses environs des noix de co-co et des myrobolans de l'espèce qui tire son nom (Kabouli) de celui de cette ville, et qui croêt dans les montagnes. "Dans les liux bas, on sème des bulbes de safran en quantitt, et cette substance devient l'objet d'un commerce d'exportation considérable. C'est un objet d'un produit éventuel qui dépend de l'état de l'atmosphère. La ville de Candahar est defendue par une citadele très forte, située sur un rocher escarpé qui n'est accessible que par m seul chemin elle est habitie par des Musulmans: il ya un quartier doant la population est juive infidele. Aucun roi ne peut preadre le titre de chah, si ci n'est aprês avoir été inauguré à Kaboul. En vertu d'une an cienne loi, la prise de possession du pouvoir a lieu dans cette ville, od l'on accourt des pays 'etrangers de très loin. Dans les terres fertiles du pays de Kaboul on cultive beaucoup d'indigo de qualité supéreure à toute autre, et qui, par ce motif est très renommé et fait l'objet d'm grand commerce. On y fabrique aussi quantitè d'étoffes de cotonqui s'exportent en Chine, dans le Khorasan et dans le Sind.' Il ya dans les montagnes de Kaboul des mines de fer très connues, le metal es d'une couleur grise marbrée, devient très-tranchaut, - - T. This we find dragged into a chapter, section and climate evidently confuned to Scinde and India.

Now the town here described was of India; the inhabitants wete not Torks, though wearing their dress,-the produce was rice, and the people would not eat beef, and the distances were measured in jouniss by carriages,-all circumstances of India; yet the people were constrath
at war with those of Kabul, a city of Tokharestan, and were at times under the king of this Kabul. Hence these latter circumstances are those of the present Kundahar of Afghanistan, of which at that period the inhabitants were Torks, the produce hardly any rice, beef consumed, while such a thing as a wheel carriage was never heard of in this mountainous country. In fact, a wretched mixture has been made of two descriptions obtained from other authors; one of Kundhar, a city of Baroach, in Guzerat, of which country, the capital, Anhulpoor, was subsequently called Nehrwalah, according to the Ayeen Ukbaree and of which as near the sea coast, the accounts must have been known to the Arabs, and of the description of Kundahar near Kabul of Afghanistan. Thus having disposed of both these places in the 8th section of the second climate, Edresee finds himself at a loss when he reaches the correct position of the second in the third climate, so blinks the question, and mentions a capital or a city of Arachotia; From Guznee he is forced by propinquity to enter again upon the subject of Kabul, which is done in a hesitating mode; though the circumstances of the coronation again mentioned, prove this town, now introduced in the 3rd, to be identical with that already mentioned in the 2nd climate. This is the great error of all compilations not distinguishing between places under the same name. It is also a very curious fact that in this quotation by Edresee we find the inhabitants of Kabul are mentioned as Jevs, and this too by an Arabian author, who would be versed in the genealogies of his country.

If we proceed to Aboolfeda we trace the same error of compilation. Rukhuj is given as a district of Segestan, of which a town was Punjwaee, on the authority of Ebne Huokul;-and on the authority of the Kanoon, it is attributed to Lat. $32^{\circ} 50^{\circ}$; Long. $93^{\circ}$, in the third climate; while in the table of places in Hind, of which all, the rest are called of the latitudes of the twenties, and in the second climate, we find a place designated Weehund, a town of Kundahar, with Lat. $33^{\circ}$; Long. $94^{\circ} 50^{\prime}$, and the third climate, on the borders of the desert of Scinde on the authority of Kanoon; almost identical with the above fixings of Rukhuj by the same author. Ebne Saeed considered it one of the seventeen Alexandrias built by the Macedonian conqueror; The error of Edresee in regard of Nuhrwaluh just mentioned, is also brought forward. I have no doubt but that Weehund, وريهن is a elerical mistake for Punjwaee miles west of the old city of Kundahar.

In the hope of arriving at some facts, in the matter of the recorded latitudes and longitudes. I tabulated all I could colleet of two mech celebrated places as Herat and Guznee. The Bed boek MSS. is so carefully written by the hand of some man versed in the science of figures, that I consider the readings to be correct, all the others being from printed works are doubtful.

| Herat. | Latitude. | Longitude. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ayeen Akbaree, | 3430 | 94 | $20\} 94^{\circ}$ | $94^{\circ} 25^{\prime}$ |  |  |
| Sadek Esfuhanee, | 3430 | 94 | 30 \} ${ }^{4}$ |  |  |  |
| Utwal, | 350 | 85 | 30 |  | $7^{\circ} 30$ |  |
| Ebne Sueed, | 3530 | 87 | 30 ¢ 86 | 55 |  |  |
| Red book, a MS. | 340 | 87 | 45 |  |  |  |
| Major Sanders, .. Kundahar. | $3421^{\prime} 27$ | 62 | 07 |  |  |  |
| Ayeen Akbaree, .. | 33 | 101 | ${ }_{\text {Tungee }}^{\text {abad,* }}$ ( $\} 10102$ |  |  |  |
| Sadek Esfuhanee, | $33 \quad 30$ | 100 |  |  |  |  |  |  |  |  |  |
| Kanoon, | 3320 | 93 | 0 Rukh | j $\}$ | 92 | $50-812$ |
| Red book, | 3340 | 92 | 40 Muem |  |  | 50812 |
| Major Anderson,. . Guznee. | 313610 | 65 |  |  |  |  |
| Ayeen Ukbaree, | $33 \quad 26$ | 104 | $\} \begin{array}{ll}103 & 35\end{array}$ |  |  |  |
| Sadek, .......... | $33 \quad 30$ | 102 |  |  |  |  |  |  |  |  |  |
| Utwal and Kanoon, | 33 35 | 94 | $\begin{array}{llll}94 & 22 & 9^{\circ} & 13\end{array}$ |  |  |  |
| Red book, ..... | $33 \quad 30$ | 94 |  |  |  |  |  |  |  |  |  |
| Engineers of the army, ......... Kabul. | 33 33' 54 | 68 | 15 Wy | Wyld's Map. |  |  |
| Ayeen Akbaree, .. | $34 \quad 30$ | 104 | $\} \begin{array}{ll}104 & 24\end{array}$ |  |  |  |
| Sadek, | 3430 | 104 |  |  |  |  |  |  |  |  |  |
| Utwal, | 3430 | 94 | $\} \begin{array}{llll}94 & 30 & 9 & 54\end{array}$ |  |  |  |
| Kanoon, | 3345 | 94 |  |  |  |  |  |  |  |  |  |
| Engineers of the army, $\qquad$ | $34 \quad 30^{\prime} 18$ |  | 90 W | ld's |  |  |

The above table I believe to contain the quantities intended by the respective authorities whence extracted. Now Herat and Gusnee hare both been emporiums of science and astronomy and astrolegy,-the former under Arab, Tork and Mogul dynasties, -the latter under the Gurneevide race of Muhmood; and at its capital must heve been at oulated the Kanoon-e-Masoode of Aboo Rehan. Hence, as far as thei rules of science and art would carry, we mayr conolude the position d these two places to be exactly fixed. The latitude of Herat difiem

* Or, the capital of a chief of theme partes Toghe, who. Hoaristiod in the deys d Subuktageen.
but a few miles from that established by Major Sanders ; while the latitude of Guxnee is identical with that ascertained by the Engineers of the army of Kabul; proving that these Moslem geographers could fix the latitude with precision. In the matter of the longitudes, we may notice that those of the Ayeen and Sadek commence from a first Meridian, distant $10^{\circ}$ west of that used by the other authorities. Now the difference of longitude between the Peak of Teneriffe, $16^{\circ} 39^{\prime}$, and some of the Capes on the West Coast of Africa, say Cape Spartel, $5^{\circ} 54^{\prime}$, is about $10^{\circ}$. Again the differences of longitude stand thus between Herat and Guznee :-


And I believe the difference between $6^{\circ} 8^{\prime}$ and $9^{\circ} 45^{\prime}$ or one-third, may be aafely allowed as the error of equation to the equatorial mile for distances estimated by marching or travelling, but also included in it, the windings of roads, ups and downs of mountains, \&c.
Kundahar is placed 2 degrees to the north of its correct position; whence 1 infer, it is fixed, not by actual observation, but by the estimated bearings and distance of marching between Herat and Guznee. Indeed the inhabitants of Kundahar appear always to have been considered a wild savage race, to be avoided. Until the days of Uhmud Shah Dorranee it was never the capital of an empire. I conceive, if the correct readings can be obtained, that with the equation above noticed for longitude, differences of latitude and longitude, when not large, may both be relied upon; but the greatest difficulty lies in the obtaining the correct reading of the Abjud numeration.
The following memoral words contain these letters in succession of their value in number, Abjud, Huowuz, Huttee Kumun Suafuz Karshut, Thukhuj Zushugh. Comparing this numerical scale with that of the Greek or any other language, may point to a correspondence between the written characters of the two nations. Both the epsilon and the eta of the Greek correspond with the aspirate of the Persian.

| Value. | Persian alphabet. | Greek alphabet. | Hebrew alphabet. |
| :---: | :---: | :---: | :---: |
| 1 | 1 | a | $N$ |
| 2 | ب | $\boldsymbol{\beta}$ | 1 |
| 3 | ¢ | $\boldsymbol{\gamma}$ | 2 |
| 4 | 5 | 8 | 7 |
| 5 | 8 | - | ก |
| 6 | , | $s$ | 1 |
| 7 | j | $\zeta$ | 1 |
| 8 | $\tau$ | \# | $\pi$ |
| 9 | b | $\theta$ | $\pm$ |
| 10 | $s$ | - | , |
| 20 | S | $\cdots$ | 5 |
| 30 | J | $\lambda$ | 3 |
| 40 | $p$ | $\mu$ | D |
| 50 | - | $\nu$ | $j$ |
| 60 | س | $\xi$ | 0 |
| 70 | $\chi$ | ? | $y$ |
| 80 | ف | $\pi$ | 9 |
| 90 | 0 |  | 3 |
| 100 | ज | $p$ | $p$ |
| 200 | , | $\sigma$ | 7 |
| 300 | * | $\tau$ | $\%$ |
| 400 | $\cdots$ | $\checkmark$ |  |
| 500 | 3 | ¢ |  |
| 600 | $\dot{\text { r }}$ | $\boldsymbol{\chi}$ |  |
| 700 | $\dot{j}$ | $\psi$ |  |
| 800 | - | - |  |
| 900 1000 | 5 $\dot{8}$ |  |  |

These letters are thus combined :-


In the Persian the highest number of each division comes first, and the divisions in the same order. A mark below the letter in the Greck indicates the division of thousands.

Now it is evident, that many of these letters are the same in form and depend on their diacritical marks for their correct value. But, ales!
in any but the most careful writing these marks are omitted, and much confusion has resulted. In the common forms of hurried writing, the د 8 g are undistinguishable: $\quad$ ج and $\tau$ for 3 and 8 are entirely at the mercy of the points. Indeed, unless in a work copied by a scientific arithmetician, it is first necessary to acertain the probable place of the figure ere this numeration can be used with any chance of success.
Native authors give a few rules-for instance, to $\underset{\text { c }}{ }$ jeem for 3 ; the tail is never drawn round, and it is thas written (7) to distinguish it from $\tau$ hee, for 8 ; viz. 7,$3 ; \tau 8$,-but copiers never attend to this rule, and in almost every printed table I have examined, I find three and eight used at pleasure. Next it is ordered to distinguish unon, for 50 ; from ; zee, for 7 , -that a twist in front be added to the former, thas ; $\bar{\sigma}, 50, j, 7$. While the yee $\mathcal{v}$ for 10 , is usually to be carried to the rear, thus $\subset 10$. How little confidence is to be given to manuscripts copied for sale may thus be supposed.
The rule for determining the latitude is the same as that used by mo-derns-the application of the declination to the zenith distance; but with no allowance for parallax or refraction. As regards the longitude we are informed by the Ayeen Akbaree, that it may be settled by watching the difference of local times, at which takes place some natural phenomenon, as an eclipse of the sun or moon; but how the exact local time of one place was to be transferred to another situation, is not given. I fancy therefore, that this important calculation was rather determined by estimated or even measured distances along high roads.

Moslem History of Herat.-The first account of the early rise of Herat runs thus,-" That when Tuhmoorus exalted himself as a God before the people, and introduced into the world every species of cruelty, some tribes of Kundahar wandered from Kabul to Ghoor and settled at Oobah. The violation of a virgin led to a disagreement, under which a portion migrated to Koowashan, on the present Malan canal, where at length a lady, called Shumeeruh, of the race of Kueomuruth, became Queen, in the days of Heyatuluh domination over the country. The fort built by her was much improved by a chief called Khurnoosh, in the days of Moses, about 1830 years before the Hejree, or some 1200 B. C. Again, in the days of Bahmun, a chief called Urghanoosh, enlarged the city of Shumeeruh, and as the inhabitants were now Christians, each bastion was surmounted with a cross!! this
event took place about 360 years before the Hejree, soon after the departure of Christ from the earth.

The second account makes Shumeran to be called after a deughter of Bahmun, a king of Persia. Her name being also Homsee chehrand; and that Dara bin Dara had commenced the works of Herat, which after his death were completed by Alezander the Great ; but Eshl the Anst exerted himself to remove every mark of this conqueror, even to changing the turns of the roads under the gates.

The third account gives the honor of the foundation of Herat to a daughter of Zohak, at a period when a Prince called Jooghun, of the race of Kue Kaoos, was settled in Badgheesh.

The fourth and most curious account is as follows :-
Alexander finding his country much distressed by the constant inroads of the Tores, obtained leave from his mother to proced to the frontier and build the city of Herat, on condition, that he did not remain absent more than one year. During the progress of the work, the people of Kohndez remonstrated against the building of so strong a post. Alexander wrote for the advice of his mother; she ordered her son to send up to the capital some of the soil from the foondation of the new city, which she in secret placed under the carpet of her council chamber.

Then she assembled her Roman councillors who all gare differeat opinions, -she requested them to retire and to pause over their opimion and to return next day,-during which she removed the earth of her son's new city, from under the carpets. On the following morning the councillors all agreed that it was quite correct and advisable to build the new city. The mother therefore wrote to her son to carry out his ons plans and intentions, as the qualities of the soil of Kohndez went to prove its inhabitants were of vacillating disposition and not likely to enforce their opinion, so Herat was built by Alexander.
The fifth account makes Alexander to find in a box an account $d$ the first building of Herat by Christians, according to the plan of which he restored the city. The sixth account makes Herat to be formded by Alexander Zowelkornuen mentioned in the Koran. The erexh account is compounded of the former statements, that Seyawosh, Dan and Alexander each built portions of the walls.
Many other versions are given : one Shaikh declaring that the prob
phet Khezer appeared and told him " the spot on which now stood the bazars of Herat, where the good and bad were contending for the things of this world, was once a sea, and that the fort was based on a rock against which endless ships had been wrecked."

I have known learned men without number throw down this account as atter nonsense, from the apparent anachronisms contained in it. The migration of the Kundahar tribes is recorded by Khondumeer as taking place in the reign of Kobad, during the excesses of the Manichæun fanatics, about A. D. 490. But the appearance of the name Kobad has given a reason for carrying back the account to the ancient Kueanian king, who flourished in the mythological periods of Persian history.

The most curious account is the fourth, and one which forms a basis for most of the other statements, and is a key to much similar Persian and Arabic history.

The fact is, this account is of a far different and very distant place, viz. Heeruk, one of the seven cities of Urak, some two Fursukhs from Koofuh. This I hit upon by finding the Kusre Khuwurnuk of Heeruh of Urak, also located by some authors in Herat of Khorasan. The work translated by Sir Wm. Ouseley contains the following:cKadseyuh, Heeruh and Khuwurnuk are situated on the skirts of the desert towards the west-the river Euphrates running by them on the east * * * Heeruh is an ancient city and large, but when Cufa was built Heeruh was drained of its inhabitants. Heeruh enjoys a pure air, and is one faraang distant from Cufa."

Now we know that Alexander Severus was for some time employed on this frontier against the Arsakian king, and subsequently against the founder of the Sasanian dynasty-Ardashur. Hence near some older fort or Kohundez, he may have built a new city called Heeruh, or re-embellished an old one of this name. We have it recorded that he was entirely under the authority of his mother Mammæa, without consulting whom he never undertook any enterprize of importance.

Herodian mentions the influence of the mother on the excellent disposition of the son; that he ruled the Roman world for thirteen years, when the Persians crossed the Tigris and commenced to ravage Mesopotamia. A large Roman army was destroyed from the non appearance of the emperior with his division; some attributed this to cowardice,
and others to his being overruled in the affair by Mammea. This influence of the mother was turned against the son by Maximine, his murderer and successor, who urged on the soldiers "to abandon a wretched woman and that easily dispirited boy who could truckle so tamely to a mother's tyranny."

These coincidences of character will warrant the assamption, that the Alexander mentioned is not the Macedonian conqueror, but the Roman Alexander Severus, and the identifying of Heeruh of Erak with Herat of Khorasan will cover the apparent anachronisms and false statements of the cross on the walls in the days of Urghanoosh; of the inroads of the Torks or Partheans; of the ancient and previons Christian inhabitants ; and lastly, of Khojuh Khezer's assertion that the city was on a rock of the waters; which might be the case previous to any change in the course of the Euphrates. The first statement has I suspect an eastern or Indian origin, having reference to a migratioe westward of the Gundhara tribes of Buddhist Hindoos from the banks of the Indus, and from them may the district of Arachotia have assumed the name of Kundahar.

Perhaps some Latin author of the period may yet exist, whence the Arabians may have translated their accounts of Heeruh, and thus have furnished them to the Persian makers of histories; attention will I suspect trace many similar mistakes, and alas! dishearten readers from placing much faith in Persian or even Arabian histories of periods earlier than the introduction of the creed of Mohummud.

The Nestorians make Herat to have been the seat of a Metropolitm as early as A. D. 411. That it was destroyed by Othman ; at which period there existed a celebrated fire temple called "Shurshak."
The term Herat, in its largest extent, as the capital of any roling dynasty, may have been often so applied, as to include many distant places, but in its proper restricted sense, it is a very small valley, bounded by hills and intersected by a stream called the Huree rood; the valley is about 80 miles in length, from Obuh to Ghorian and of various breadth,-being about 20 miles in the longitade of the city. This area constitutes Herat proper, but in the common acceptation of the term, are also included many immediate dependencies bearing distinct names. This area is well watered; on its northern side by kareez, from the bills, and on its southern side by the canals taking
of from the river, watering the cultivation and running to the principal towns. The length of some of these canals proves the ancient wealth of the district. The Malan canal, to the north of which is situated the city, is said once to have been carried round the corner of the southern range, and when in good repair, to have discharged its superfluous water into the Furuh rood. The main stream of the Huree rood early in summer, when full by the melting of the snow, passes beyond Ghorian, and always reaches a small village called Surrukhs, east of Ghorian, and hence has arisen the idea that the waters of the Herat river ran to the distant large districts of Surrukhs near Merve.

When Herat was the capital of Khorasan and residence of a powerful prince, the whole of the above area was covered with most beautiful gardens, orchards and farms surrounding the various forts of the different chiefs and courtiers. Previous to the late frequent visits of the armies of Persia and of Kabul, the spot is described in all its beauty and fertility, by the most glowing terms of the writers, whether of prose or poetry. It truly deserved its title of the "garden of Khorasan.'" The twelve canals passing by the various towns and villages have each a name, as have also the many collections of houses here and there built on the banks of the streams. In the early Arabian conquests, a collection of such villages and hamlets obtained the name of the canal on which situated, as the Rood Unjeel, but after the settlement of the Moguls, the word Bolook-the Torkee term for a spring-was substituted, and the same collection is now called the Bolooke Unjeel.

Until the days of the Temoorian prince Shah-rookh Mirza, Herat was considered more in the light of a provincial town, than of a royal residence,-it was not the chief capital of any Arsakian or Sasanian king,-nor the residence of any of the Arabian Califs,-bbut considered rather as a strong fortified frontier position ; on the Mogul invasion it rose to greater height; and under Shah Rookh the city reached its present form, and perhaps its highest point of celebrity as to beauty and embellishment, though not perhaps of extent. The walls then had five gates,-the Urak, to the west ; the Khoosh to the east ; the Feeroozabad to the sonth, -while to the north were two,-the Mulek and Ku-tubchak;-the foundation of the walls were considered 60 zurua broad; the walls themselves $\mathbf{3 0}$ zurua in height,-and each side $\mathbf{2 0 0 0}$ zurua in length ; while the external circuit was estimated at about one fursukh.

The N. E. corner bastion was called Uleeusud,-the N. W. corner the Ful Khanah; the S. W. the Khakestur and the S. E. the Khoojuh Abdal Misree. The separate citadel, originally built by Mulek Fukhroldeen Kord in a temporary form, was reconstructed of great strength and solidity by Shah rookh Mirza in 818 H .

In the Ebne Huokul, translated by Sir W. Ouseley, Herat, as the seat of a governor from the Khalif of Bokhara, is not described as a place of any very great beauty, fame or importance ; the only building mentioned being a celebrated mosque; as I have before proved, the canals then bore nearly the identical names of the present day, and with a little trouble I believe almost every proper name of that work could be traced in a place of modern times. Edresee adds-" that ere Herat rose to its present importance, a town called Khorasanabad, 9 miles west in the direction of Pooshung, was in greater estimation."

Ebne Huokul mentions a mountain producing neither grass or wood, or any thing but stones, which serve for mill stones. "Here is a place inhabited called Sekuh, with a temple or Church of Christians." This is no doubt a portion of the mistaking of Herat for Heerah, on the Euphrates, where many hermits would have selected barren spots of the sort described for their earthly place of mortifying the flesh.

The moment that the river fairly emerges from the mointains at Oobuh, its waters are by dams forced into various canals, which ranning parallel to the stream, by degrees diverge from it and irrigate the entire valley, which thus in times of prosperity form one extended mass of gardens, vineyards, orchards and pleasure grounds.

Many of these delightful spots are by their fruit known and cekbrated over all Persia. When Herat was the capital and emporiom of commerce, and had large funds to employ bn agriculture, and ample armies to defend its possessions, these gardens flourished; but when commerce failed by the introduction of new routes and sea voyages, and the country was overrun by hostile armies, the water coarses were destroyed, the trees cut down for military purposes or fuel-and the face of the valley reduced to its original feature of a ston y upland. Such destruction would be but the work of a season, but the restoration one of many years.

The various divisions with their canals are thus recorded :-
Guzaruh or Malan, to the South of the river and city; Sulta

Sunjer built a grand bridge over the Herat river, on the road to this district, in the year H. 505.
Unjeel. In which is included the city of Herat.
Ulanjan. North of the river, but South of the city; 5 fursukhs in length from East to West.

Ghoorwan and Pastan. North of the river ; East of the city.
Tooran and Tooneyan. North of the river ; East of the city.
Kheyaban. North of river and city; near to the Unjeel district, all the dead of the city lie buried in various portions of this divisionwhich is a large field of graves.
Subkur. North of river ; East of city.
Purwanah and Huwadushtuk. North of city. In it is situated the hill Called Kazur Gah, celebrated for the tomb of Abdullah Ansaree; and for the Tughoor Robat.
Kumbarak. South of river.
Oodan and Teerzun. South of river.
Such are the immediate districts round the city whose taxes and grain revenue are included in the collections of the city.
The more distant divisions are :-
1st. The Heerat rood; that is, the Herat river while confined into a more narrow valley than after passing Oobuh; the altitude and consequently the cold and frost are much greater, hence we find fruits of this kind of climate celebrated as walnots, apples, almonds, \&c. This division also contains many minor districts, as Oobuh; Kuwashan; Pooran ; Duk; Mulmuz; Feerooz-Koh, the ancient capital of the Princes of Ghoor ; Cheshtee, the burial ground of the celebrated Saint Kuajuh Moodood Cheshtee. A hot spring of some celebrity also flows from one of its hills; these also contain quarries of white marble, while Shafolan is celebrated for its mines of iron and lead, and a hot spring, which cures many diseases and is in consequence mach resorted to by the sick and infirm ; this district of Herat rood lies between Herat and Ghoor. The river of Herat rises, according to Arthur Conolly about 10 miles West of Yukaulung, at an elevation of 9,500 feet, passing Deh Zungee, Duolutyar, Badgah of Chukcheran the fort of a leading chief of the Feeroozkohees. After some miles more through this almost independant Emak, the river and its boundary lands constitutes the district of Herat, called Herat rood. The country North of this
line, circling by Muemonah towards the country of Balkh, is known as Ghorjestan.

The division to the North-East of Herat is Khorukh, once a moost fertile and populous spot; it lies some 50 or 60 miles to the east of the still more celebrated canton of Badgheesh.

This district is about 160 miles long by 120 broad, situated to the North of Herat, being composed of both high mountains and corre spondingly low vallies; it enjoys a great diversity of climate, prodecing both cattle, corn, fruit and timber; in particular a tree called Uroos, which is seldom destroyed by rot or insects ; 70,000 Khurwars of grain were with no difficalty collected from this division in the days of Sultan Husuen Bahadoor Khan, as the grain revenue. Robate Khoosh is considered on the boundary between Herat and Badgheesh. A river of some size, called the Purkhud, is mentioned in Badgheeah.

Three circars did compose this district-Lungur Umeer Gheeyas, Chuhel Dokhteran and Jurlan.

The first owes its name to a holy Seyud of the days of Timoor; the second is watered by a rapid stream, and the third contains the wonderful fort of Nurutoo, situated on the summit of a bare rock, with only one narrow winding road to the gate; than it is no stronger fort in Khorasan. The climate is so cold that flowers appear here only is the autumn of the lower altitudes. Tukhte Mulek is a small district surrounded with mountains, which during even summer are capped with snow.

Direct west of Herat, between it and Ghorian, hes Pooshung, rith its robat and musjed, the former being one of bad omen. Near the hills round this robat are marks of feet imprinted on the stones, said to be those of the prophet Abraham; while all the stones are in the form of birds and animals, being petrifactions ; there is also, a spring of aperient water much visited by the infirm. Koosooyah is of this district, celebrated for a defeat given to the Moghuls in the year H. 695. Koosooyah is the Kouseri of Edresee and Sir Wm. Ouseley's work.

Felbundan is a large plain entirely deroted to the cultivation of melons of the largest size; to the eye of the stranger these white, round immense melons scattered over the plains appear like sheep lying down to repose.

South of Herat rood, East and North of Furah, reaching to and at
times including Zumeen deewar, lies an unexplored but often mentioned country, Ghoor-described as a series of strong hills and narrow vallies, giving rise to the several rivers running into the lake of Seestan ; it was once the stronghold of a warlike nation, which conquering eastward became celebrated as rulers of Guznee. The chiefs claim descent rom Zoohak, others again contend they are descended from the lost tribes of Israel, but allow that they embraced Eslamism at a very early date in the days of Ulee; whose firman they possessed till the days of Buhram Shah, son of Sultan Musood.
The fort of Kheesar is celebrated for its strength, and for its resistance to the armies of Chungeez Khan ; this king granted the district to the chief in possession, Roknoldeen, who thus became the founder of the Kord dynasty in Herat ; and a firm ally of the Moghuls.
The following streams flow South from Ghoor: The Moosa Kula Khashnahr, Furah and Guz, besides many famous canals, as the Ebraheemjoee.

Ahunguran, Khurshut, and Urmaj are mentioned as forts of this country.
Below the range of hills bounding the valley of Herat to the South, lies a large district usually considered a dependency of the city; it is called Esfesar, and is watered by a river of the same name. On the banks of the stream are the ruins of what was once a fort of the greatest streagth of position and art, called Mozuffer Koh, and built by Uluptugeen.

The fort was situated on the very top of a rock, the sides impervious to horsemen, infantry, or almost even birds; there was one winding entrance towards the river, the walls were nearly 30 feet broad; so that eight horsemen could ride abreast; a stream of water also flowed from the top of the rock. Another strong fort was Sharestan, on the other side of the river, also celebrated for its strength, and said to have been built by Balkuees.

Budrabad and Furumgan were also strong castles, now in ruins.
The two rivers of Udruskeen and Guz unite in this district, near the town of Subzwar. This word Esfezar is considered a play on the term Sepurzur; and may be the position of the country to which one of the silver shielded Regiments of Alexander was banished by his successor for mutinous conduct. Declining southward in altitude, this
district is extremely fruitful, its pears are celebrated, as also the small unab, which are as delicate as grapes. The fort was once of great strength. One district, Zawul, was celebrated for its kareez, the waters of some being so strong and ample as to turn mills.

Ubkal or Ookul to the South, and Junburan to the East, are districts; from the latter the road leads to Duolutabad.

Furumgan is mentioned as containing the beautiful carved pulpit of some early saint, which was destroyed by the barbarous Beloochess. This place had the reputation of being older than even Herat.
To the South, on the Udruskun, were two small forts opposite each other, called Dokhtur and Pesur.
The modern town of Subzwar is a mean place, consisting of a colkec tion of mud huts.

Amply watered by the neveral streams issuing from the mountrins, this district was once considered the granary of Herat, but the absence of security and good government has almost destroyed its prospects and reduced it, with all the surrounding country, to a very barren, ill cultivated, inhospitable tract. The present popalation is Tajeek and Persian-the dominant tribe Afghans, under a Sirdar from Herat.

South of Subzwar lies the country called Furah, sometimes considered independent,-indeed once said to have been the capital of a mighty kingdom and the residence of the Persian hero Rostum. It was subsequently a district of Seestan, but is now claimed as an outwort of Herat.

The chiefs of Furah have always asserted for themselves a rers illustrious descent, and have often struggled to obtain their hereditars freedom ; opposing a foreign yoke. One Governor from Herat is mear tioned as finding them so troublesome that he invited eighteen chifs to a feast, and murdered the whole ; only one eacaping.

Near the town is a hill called Burunduk or Beechuk; this contrims a natural arch and cavity, from which water constantly drops. This phenomenon is by the vulgar connected with the divine author of ${ }^{[l}$ things, and considered a mysterious proof of his hidden power, hence it has become a place of pilgrimage and of votive offerings; if the witer increases in its droppings on the head of the devotee it is a sign of success to his prayer. The place is called Take-sungee and Koh-bejar baran.

Anar-duruh is a large district of this country, celebrated for its pomegranates. The forts of Kah and Ook lie south of Furah. The former west of the river; Ook is the name of a sub-division lying between Furah and Seestan; a range of hills in it contains one of those singular slopes of sand called Reg-ruwan, to roll down which is considered a very meritorious action. On this range is said to exist the ruins of Tukhte Rostum, a stronghold of this warrior. Modern Furah is a place of no strength and nearly deserted.
The river of Furah is a large stream, abut 30 miles above the city, in Joly it was 35 yards broad, 24 feet deep, ranning $1 \frac{1}{4}$ miles in the hour, and just fordable, but during torrents often detained caravans.
Furah extends East to the river of Khash, South to Joeen, and North to Aseyabad. Except on the banks of the rivers the face of the country is composed of large flat hard dushts separated by bleak ranges of hills.
The aborigines are Tajeeks and Persians; the dominant tribe Afghans, under a prince or chief from Herat.
To the South of Furah lies Seestan or Seegestan, sometimes called Nemrooz. The earlier inhabitants were called Sukan and Sukzee; which last some consider to have be arabized into Sug or Suj, and hence Seejeestan. A tribe was also known as Sunjuree.
Lash and Joween are two strong forts on the frontier ; between them flows the river of Furah. We trace Joween in the work of Sir Wm. Onseley, and in Edresee, and from it have a distinct distance to Zurung, the ancient capital ; vis. to Peer or Dostar, one march ; to Gurgoonah, ( 12 Arabian miles,) and to the capital 9 miles, more; say a distance of 44 English miles. Ebne Sueed has recorded Zurung as 20 miles to the north of the Helmund; These forts are constantly in the mouths of moderns as places of great strength ; Captain E. Conolly found the former a mere castle on a cliff, but the latter a place of more strength, and capable of resisting any eastern armies ; as it had often done those of Herat.

The Furah river flows into the lake or Zuruh of Seestan, an expanse of low marshy land intersected by bodies of water of various depth. The lake is in books represented as nearly 100 miles in length by the same in breadth; the exposed lends are culturable, the water swarms with fish, and the reeds and jungle afford cover to endless hogs and wild fowl. The down and feathers of the birds forms a large article of
export. From the number of canals the land was formerly froitfal and valuable; one author says, a kulbuh would in his day sell for 1000 Kubkee denars. By the account of natives of the present day the like is not above 30 miles in circuit.

We have no very good acconnts of the country; Captain Christie passed through it in 1810, Captain E. Conolly made a rough survey of the road, while a gentleman of the name of Porbes was murdered in the attempt to reach Kundahar from Persia by the Seestan roate. According to histories the ancient capital was called Zorunj, situated in Lat. $30^{\circ} 30^{\prime}$, and distant 90 Arabian, or 118 English miles from Ghereesh, the ferry on the Helmund. I think its position may be fixed with some precision on these data, and will be found to correspond with the ruins of Zero, No. 40 of Captain E. Conolly's map.

A fort called Rostum was situated near the lake; while a strong. hold named Husne Tak, is mentioned having three separate circumvolutions of walls; between the 1st and 2nd were the fields and cultivation, between the 2 nd and 3 rd were the houses of the people, and within the third was supposed to be the prison, where criminals were starved; one author states he had seen a house containing $\mathbf{4 0 0 0}$ skulls of haman beings.

Zurunj certainly existed during the Alexandrian expedition towards India, and is mentioned in the early histories of Moslem conquests; it was also the capital during the supremacy of the Safar dynasty of Seestan, and must have enjoyed great wealth and prosperity, as the centre of the large dominion which included Fars, Kirman and Kho- resm.

Tak was destroyed by Muhmood of Guznee, who then took the name of Soltan : and this captare might account for the abovementioned heads in the inner fort. But there exist several places of this name.

Without minute inspection it is most difficult to settle sach locations. Sukwuh was mentioned to me as the capital, and I suspect oceupies a position south of the ancient Zarunj, being, I conclude, the city netz Koh-e-Khuajah, and identicai with Tak. It is the residence of Mohari mad Reza Khan Seestanee, who considers himself descended from the ancient Keeanian kings ; the city is said to be half as large as Kundabar, and to be 10 miles from the river Helmund. A place called Rakhyj was mentioned as a very ancient ruin where are yet dug up old coim. Zal is the position of an old fort on the river: Zuenoon, or Jueacon; mer the modern fort of Alam Khan is the point where the Khash rive
joins the Helmund, while Mean-rodee or Roodbar is the strip between these two rivers constituting the base of the district of Gurmsael. Julalabad is a collection of hamlets, the property of Reza Khan. Shuhruk is called the town of Mehdee Khan Sustanee.

I have no doubt, that in former times when the whole of this country in its largest extent, of the space between Kundahar, Kirman and Herat, was subjected to a very powerful dynasty; life and property safe; and the reward of labour secure; that the whole face of the country was irrigated by canals taking off from all the rivers; but since these have been destroyed, the body of water reaching the lake is much augmented and hence its limits so extended as to have altered entirely the fice of the country.
The country contains many natural curiosities, as burning hills, pits of sal-ammonisc, veins of sulphur, and beds of saltpetre; the production of this last mineral made the country valuable. Nader Shah made the possession of it a subject of boast to the Porte, on this account. Peer Kisree is celebrated for its salt and asafoetida. The following is an altempt to reconcile several published routes.

| Edresee. | $\begin{gathered} \text { Sir Wm. Ouse- } \\ \text { ley's trans- } \\ \text { lation. } \end{gathered}$ | Capt. Conolly's | Common report. | $\int_{\text {map. }}^{\text {Capt }} \text { Conolly's }$ |
| :---: | :---: | :---: | :---: | :---: |
| Joween, . . . 1 j |  | -• | Joween, |  |
| Dostar, .. 12m. |  | -• | Shaitanul, and Bunjar, .. | Bunjar, .....41. <br> Shyban, .... 42. |
| Kurkooyuh,.... | Kerkoonuh 4 f. | Goorgooree, No. 48. | Duahtuk,...... | A town of Shakorhis. |
| Zurunj, ....... | Zurung, . 3 f. | Ruins of Zero, No. 40. | Sukwah, .. ... | Sekoha, .. .. 29. |

Sharok is the district marked Shakorhis by Captain Conolly.
The ancient road to India is thus given :-


[^2]
## APPENDIX.

Notes by Mr. Johannes Avdali, on the extracts propased from the work of Moses Khorenensis..
 xician and bibliographer of great repute, flourished in Armenia in the middle of the fifth century. He was well versed in Syrian and Persian languages. He went to Athens and zealously applied himself to the study of the works of Grecian writers and philosophers. His name is well known to the philologers and antiquarians of Europe, by the publication of the text and a Latin translation of his history and geography, by the two brothers, William and George Whiston in 1736. The learned linquist and orientalist, P. E. Le Vaillant De Florival, professor of the Armenian language at the Royal Academy of Paris, has lately presented the literary world with a French translation of the history of Moses of Khorene, which was published at Venice in 1841, together with the text. Although the geography appended to, and published with the history of Moses Khorenensis by the two Whistons is altributed by some writers to another author, yet the genuineness of its antiquity cannot in my opinion be at all questioned.

I have added the original Armenian to Major Anderson's list. As much of his attempts go to prove the great confusion arising from the mistakes of proper names, I also subjoin the same list from a ver correct edition of Moses Khorenensis, as printed at Venice in 1843. Many of the names are different, and several places omitted.

From the preface to this recent edition it appears that the retern Mechitharistic Society of Venice have experienced no small difficulty in procuring correct manuscript copies of the geography of this ancient Armenian author. Of this they possessed only five in their extensin library. All of them were, however, without the least mention of the dates and places in which they were respectively transcribed, and four were altogether incomplete. After incessant inquiries they at lest sseceeded in obtaining a beautifully written and most correct and complete manuscript copy of the work from the library of the convent of Botr
 abled to publish in 1843 a revised and improved edition of the complete works of Moses Khorenensis. A full Catalogue of this library, d
venerable antiquity, comprising 121 pages, was published at St. Petersburgh in 1840, by that distinguished and elegant orientalist and Armenian scholar, M. Brosset, who undertook and completed the work under the auspices of his Imperial Majesty the Emperor of Russia. (Vide Journal of the Asiatic Society of Bengal, No. CXXV., old series, page 415-16.)
 (Pharasanga, Latin) ; (фapardryns, Greek) signifies a distance of three miles or a league.

Major Anderson has certainly taken a great deal of pains in consulting several Arabic writers. It would undoubtedly be very desirable to give the dates in which these writers did respectively flourish. There is no knowing, for instance, in what year Hamdallah Kuznevee wrote his book, or in what century did he flourish.

A somewhat similar story of the fabulous qualities of the soil of the country is mentioned in the history of Armenia, in connection with the circumstances of the imprisonment of the Armenian king Arsaces by the Persian king Sapor. (See Avdall's paper, Journal Asiatic Society, Vol. VI. page 81.)

It is not only customary, but a very common practice with the Armenian nation to indicate the respective value of numbers by a numerical scale of the alphabet of their language; $\#$, for instance is 1, 立, 2, 4, 3, 4, 4, E 5, \&, 6, F, 7, 匹, 8, R, 9, d, 10 , and so on. The numerical scale of Major Anderson's valuable paper will, perhaps, be deemed more interesting by the addition of another column, exhibiting the characters of the Armenian alphabet, correspondent in their numerical value with those of the other three languages alluded to in the paper. The following is a hurried specimen :-

Noter on the Geography of Weatern Afghanistan. [Jons, Value. Armenian Alphabet. Valwe. Armenian Alphabet.

8
9
10
20
30
40
50
60
70
80
90

100 200 300 400 500 600 700

| - | 100 |
| :--- | :--- |
| + | 200 |
| + | 300 |
| + | 400 |
| + | 500 |
| $亡$ | 600 |
| + | 700 |

800 900 1000 2000 3000 4000 5000 6000 7000 8000 9000
$\underset{ }{5}$
$\delta$
$\stackrel{ }{ }$
8
2
-
$\varepsilon$
I
2
a
-
2
-
F
J
-
$t$

From the edition of the two Whistons, printed in London in 1736.
Persia is called by Moses Khorenensis "Chusti-Nemrozia," touching the eastern border of Khuzastan, and the confines of Media, containing twenty provinces.
Armenian. Whiston's reading. Identifications or approsimations.

| U.S. |
| :---: |
| Utyens |
| \}-turs |
| Tuluabem, |
| 40res, |
| 40nms |
| Vaturpmb |
| UR\% |

Persia.
Persia.
Aspahana.
Mesuna.
Hacara.
Panaetia.
$\begin{array}{ll}\text { Cermana. } & \text { Kerman. } \\ \text { Curana } & \text { Kharan. } \\ \text { Macurana. } & \text { Makaran. }\end{array}$
Sende Seinde, lower.

Armenian．


Whiston＇s reading．Identifications or approxi－ mations．

Henda．
Merana．

Petvastania．Punjabistan，the Punjab． Segastania．Sejestan． Aplastania．Afghanistan． Dera．Delum，in the Persian al－ phabet． Malia．
Mahie，Cambay． Mandarie，a place of con－ siderable trade．
Chozerhastania．Khazeristan． Palha． Ebuha．
Rhesira Parhasa－Producing the best pearls， nia．

Hind；round Sir－Hind．
Mehran ；banks of the In－ dus，upper Scinde．

Mela．
Mahica．
Mauna．

Bulharee，country of the Bahrien，

Aria is called by the above writer，Chusti－Chorasania，lying between Media，Persia，the Caspian and India．

|  |
| :---: |
| Q．efle， |
| Urucrs， |
| URomemom， |
| Splambles， |
| qumpramb， |
| Prim， |
| 0－2tur， |
| T－acker |
|  |
| spars， |
| 2－ $\mathrm{F}_{\text {R }}$ |
|  |

Comsia．
Hyrcania．
Apersaria．
Meruma．
Arovastia．
Rheucatesania．
Nestimanaca．
Beznya．Boozjan，near Jam ？
Salcania．
Docania．
Anapalia．
Heruma．，
Zambyrus．
Naxeria．

Comis．
Goorgan，Hoorkan． Abewurd？
Merve．
Arachotia？Hureeswatia？
Kandahar？
Kho Kakusus，Kabul ？

Talkan．
Damghan？
Huree ；Herat．
Subzwar？
Neeshapoor．

Armenian．Whiston＇s reading．Identifcations or apprasi－ mations．

| Traft <br> QLazek， <br> Qurpen， <br> రードa世， <br> R－40mun， <br>  <br>  <br>  |
| :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |


| Dezina． | Zoozen． |
| :--- | :--- |
| Avazacia．  <br> Varzania． Beerjon？ <br> Mansania． Muzeenan？ <br> Zaxtana． Kohestan． <br> Bahlia，quae et Par－ <br> thalkh．  |  |
|  |  |

Domatia．Dumadutha；Dumadoot； or Deemut of Dumavind．

|  |
| :---: |
|  |  |

Larimanacia．
Siria．
Baricania．
Dobonia．

Scythia（04hcrpm in Armenian）is called Apachtaria（LLerfarrf） Bactria or Thurchia，extending from the river Ethil（Volga）to the
 unto Zenia（China．）Emavon（b，undi）is the loftiest and longest of all mountains．Scythia is inhabited by forty－four nations，among them
 several other barbarous races and tribes．The Sogii are famous for their wealth and love of commerce，and inhabit the country lying be－
 Sogii are perhaps the Sakce．

From the Venice edition of 1843.
Persia is called by Moses Khorenensis，Chusti－Nemrozia，touching the eastern border of Khuzastan and the confines of Media，containing twenty provinces．
Armenian．Avdalt＇s reading．Identifications or apprasi－ mations．

|  | Persia． |
| :---: | :---: |
| Q1040¢4\％， | Ispahan． |
| 『ちをm， | Meshun． |
| く－4－ヶ， | Hakar． |
| Ulimits， | Auayid． |

Armeniar. Avdall's Reading. Identifications or approai-

| Yents, | Kerman. |  |
| :---: | :---: | :---: |
| 4-pmit | Kúran. |  |
|  | Makaran. |  |
| 1F\%\%, | Send. |  |
| JTrus, | Méran. | Hend, omitted. |
| 95-uncores | Petwasht. |  |
| J-7 | Ságastan. |  |
| UとEmembl | Aplástan. |  |
| 9+6\%, | Gher. | Ghor. |
| $\mathbf{U}^{\text {crab }}$ | Mégh. |  |
| U-5kt, | Mahik. |  |
| U-0.s, | Mawnin. |  |
| \|uerthememest, | Kocheristán. | Cutch or Kedge. |
| Ф- | Palh. |  |


|  |  |  |
| :---: | :---: | :---: |
| 0-52kf 'R achpous f-24 | Reshír, in the city of Páhrsán. |  |

Aria is called by the above writer Chusti-Chorasania, lying between Media, Persia, the Caspian and India.

| 4-25; <br> Q.atel, | Kóshm. <br> Virkán. | Workan, Hoorkan, Goorgan. |
| :---: | :---: | :---: |
| Lure-fp, | Aprshahr. |  |
| EPomer, | Merám. |  |
| URemememfitu, | Arwathréw. |  |
| 4-melectu, | Katéshán. |  |
|  | Nemanimak. |  |
| Pefis, | Bijin. |  |
| U-74, | Saghkan. |  |
| 9-uts, | Gozkín. |  |
|  | Anaplah. |  |
| \% 0 mor | Hirdm. |  |
| 205, | Zam. |  |
| ワt-2 | Perdz. |  |
| 4-marts, | Nakhcher. |  |
|  | Dezinwazak. |  |



Varjan. Mánshán. Jákestán. Bahl, i. e. Parthia.

Gormát. Várimának. Shírí. Barikan. D6́vb6n.

Note on the transport of coal from the pits at Sonadek to Bombay, by the Nerbudda.-By R. N. C. Hamiliton, Esq. Resident at Indore.

No. 494 of 1849.
From R. Thornton, Esq., to the Secretary Asiatic Society, Calentta. Dated Agra, the 1st May, 1849.
General Department, N. W. P.
Sir,-In continuation of the letter addressed to you from this Department under date the 1st February last, I am directed to forward, for sabmission to the Asiatic Society, a copy of a note by Mr. R. N. C. Hamilton, Resident at Indore, on the transport of coal from the Pits at Sonadeh to Bombay, by the Nerbudda.

2nd. The Lieutenant-Governor observes that the above note is by far the best and most useful narrative of the experimental journies which has been compiled. The Society will, of course, decide whether it is worth their while to publish more on the subject.

I have the honor to be, Sir,
Your most obedient servant,
R. Thornton,

Assistant Secretary to the Government N. W. P.
Agra, the lst May, 1849.


[^0]:    * The error of a traveller being well establishod between some determined plactes might anable his whole work to be reduced to an approech to fact.

[^1]:    * The first Meridian of Ptolemy is some point of the Canary Islands. Say W. 14. Others consider the first Meridian to be some point of the Azores Say W. $24^{\circ}$. A difference of ten degrees, which we do exactly find to exist between some of the Arabian tables of Longitude. Others assume a western point of the mainland of Spain, and a few authors conceive the point to be a central town of Spain. Hence to mere map-makers the confusion.
    $\dagger$ The Muhammadan measures are extremely variable and difficult to fix; the commonly accepted version is-

    | 4000 Zurua $=1$ Meel | Zurua $=1$ Gus khuyatee. |  |
    | :--- | :--- | :--- |
    | 3 Meel $=1$ Parsakh 8000 | Gus $=1$ Parsukh. |  |
    | Assuming the Zurua $=21$ | inches. |  |
    | The Guz | $=31$ | inches: |
    | The Fursukb | $=3.97$ | British miles or 4.31 Roman milea. |
    | The Arabian Meel $=1.32$ | English miles. |  |

    4 c 2

[^2]:    * Crossing the Khash rood.

